

The Effect of Ginger on Nausea and Vomiting in Pregnant Women

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ABSTRACT

Nausea and vomiting are common problems experienced by pregnant women, especially during the first trimester of pregnancy. Ginger has been the focus of research in efforts to treat these symptoms. This study aims to determine the effectiveness of ginger in treating nausea and vomiting in first trimester mothers. This research method is systematic (systematic review) which is a scientific approach used to integrate and compile findings from various relevant studies in one comprehensive analysis. Researchers conducted a very thorough and structured search in various literature sources to find studies that were relevant to the research question. The research results show that giving ginger regularly for 4 days can reduce the frequency of nausea and vomiting in pregnant women who experience hyperemesis gravidarum. Giving ginger to pregnant women in the first trimester can cause side effects such as stomach irritation, dry mouth and diarrhea. Apart from that, giving ginger in high doses can also cause an increased risk of bleeding and uterine contractions. Ginger has the potential to reduce nausea and vomiting and their intensity, and may also influence the duration of symptoms of nausea and vomiting in pregnant women, especially during the first trimester of pregnancy.

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INTRODUCTION

Nausea and vomiting in pregnancy or better known as emesis gravidarum is a common complaint experienced by pregnant women, especially in the first trimester. These complaints can interfere with the daily activities of pregnant women and can cause weight loss. Ginger is a herbal plant that has long been used to treat various health complaints, including nausea and vomiting. Ginger contains compounds that have antiemetic effects, which can reduce nausea and vomiting.

Nausea and vomiting are common problems experienced by pregnant women, especially during the first trimester of pregnancy. To overcome these symptoms, ginger has long been of interest in health research. Ginger is known to have anti-nausea and anti-inflammatory properties, which makes it a natural choice for pregnant women looking for a solution to the nausea and vomiting that often occurs during pregnancy. Several scientific studies have revealed that ginger can help reduce the intensity of nausea and vomiting in pregnant women. However, although this initial evidence is promising, it is important to always consult a doctor before consuming ginger or ginger-based products during pregnancy, as dosage and safety of use still require closer attention and can vary from individual to individual.

The effect of ginger on nausea and vomiting in pregnant women has also attracted further research interest to understand its mechanism of action. Ginger contains active compounds such as gingerol which is believed to have a calming effect on the digestive tract, helping reduce nausea. Ginger's anti-inflammatory properties may also help relieve inflammation in the digestive system that can trigger nausea and vomiting. In addition, the distinctive aroma of ginger can provide a sense of comfort and relieve stress, which can influence the intensity of nausea and vomiting, especially those related to psychological factors. However, it is important to remember that each pregnancy is unique, and reactions to ginger can vary from individual to individual. Therefore, there needs to be medical supervision and consultation with a doctor before taking any steps to treat

nausea and vomiting during pregnancy, including using ginger as a supplement or natural medicine. Although initial evidence shows the positive potential of ginger in treating this problem, further research is still needed to confirm its benefits and determine a safe dose for pregnant women.

METHOD

Systematic research methods (systematic reviews) are a scientific approach used to integrate and compile findings from various relevant studies in one comprehensive analysis. The aim of this research was to determine the effectiveness of ginger in reducing cases of nausea and vomiting in first trimester pregnant women. In conducting a systematic review, researchers start by formulating clear and specific research questions. Then, the researcher conducted a very thorough and structured search in various literature sources to find studies that were relevant to the research question. Once all relevant studies had been identified, researchers assessed the methodological quality of each study, considered the level of risk of bias, and collected outcome data from each study.

RESULTS AND DISCUSSION

Table 1. Research Results from Literature Review

No.	Researcher	Research Title	Year	Method	Research result
1.	Ariendha, DSR, Setyawati, I., Hardaniyati, H., & Devitasari, ANI	Effectiveness of Ginger to Treat Emesis Gravidarum in Pregnant Women.	2023	This study is a review literature (literature <i>review</i>) who tried to explore the effectiveness of ginger to treat emesis gravidarum.	Several studies show that ginger is effective in treating emesis gravidarum
2.	Astriana, A	The effectiveness of giving boiled ginger water to reduce nausea and vomiting in 1st trimester pregnant women in the work area of Penawar Jaya Health Center, Tulang Bawang Regency in 2017.	2019	The type of research used in this research is quantitative with a quasi-experimental approach with a one group pretest-posttest design.	The research results showed that the average (mean) nausea and vomiting in pregnant women in the first trimester before giving boiled ginger water was 9.8 times. Whereas after giving boiled ginger water 5.5 times.
3.	Herman, H., Jumurin, NF, & Sari, M.	Study of Providing Warm Ginger Drinks (Zingiber Iffivinale) in Reducing Nausea and Vomiting in First Trimester Pregnant Women in the Kulisusu Health Center Working Area.	2023	Observational descriptive research method using a case study approach and a sample size of 3 people. The intervention of giving warm ginger drink was carried out once a day in the morning for 3 days.	Decreased frequency of nausea and vomiting before giving warm ginger drink (pretest), on the first day nausea was 10-12 times a day and vomiting 5-7 times a day. Meanwhile, the decrease in the frequency of nausea and vomiting after giving warm ginger

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| 4. | Indrayani, IM, Burhan, R., & Widiyanti, D. | Effectiveness of Giving Ginger Wedang on the Frequency of Nausea and Vomiting in First Trimester Pregnant Women in North Bengkulu Regency in 2017. | 2018 | The method in this research is Quasi Experiment with a One Group Pre test- Post test design. | (posttest day 3) resulted in nausea 1-4 times a day and vomiting once a day. The results of this study showed that the average frequency of nausea and vomiting for pregnant women in the first trimester before being given ginger tea was 9.30. Meanwhile, the average frequency of nausea and vomiting for pregnant women in the first trimester after being given ginger tea was 4.50. |
| 5. | Kurnia, H. | The Effect of Giving Ginger Aromatherapy on Nausea and Vomiting in First Trimester Pregnant Women. | 2019 | Quasi experimental research design, with a pre-posttest control group design type. | The results of the research were that most respondents did not experience nausea and vomiting after being given ginger aromatherapy, namely 12 people (66.7%) |
| 6. | Liawati, L., Mariah, S., & Hernawati, E | Hyperemesis Gravidarum Differences in Levels of Nausea and Vomiting in Pregnant Women with Boiled Water in the First Trimester and Hyperemesis Gravidarum Before and After Being Given Ginger Boil at the Sehat Medika Clinic in 2021 | 2022 | The research design used was Quasi Experimental with a One Group Pretest Posttest design. | Almost all of the intensity of nausea and vomiting before administering boiled ginger water showed the level of nausea and vomiting in the moderate category, namely (78.1%). The intensity of vomiting and nausea after administering ginger boiled water was in the mild category, namely 29 people (90.6%). |
| 7. | Nurdiana, A. | Effectiveness of Giving Ginger Candy Against Nausea and Vomiting in Pregnant Women | 2019 | Quasy Experimental research design with One Group Pretest Posttest design | The results of the study showed that the frequency of nausea and vomiting before the intervention was given was 10.93 and |

		at the Khairunida Sunggal Clinic in 2018.			
8.	Oktaviani, P., Indrayani, T., & Dinengsih, S.	Effectiveness of Giving Brewed Ginger and Mint Leaves Against Nausea and Vomiting in Pregnant Women in the First Trimester at PMB Bogor Regency in 2021.	2021	Quasi experimental research with pre and post-test design without control group.	after the intervention was given, it was 3.33 with an average decrease of 7.60. The results showed that there was a difference in scores before and after being given the ginger and mint infusion ($p < 0.05$) with an average decrease which showed that the ginger infusion was more effective than mint.
9.	Purba, AET, Haslin, S., & Siregar, RN	The Effect of Ginger Candy in Overcoming Complaints of Nausea and Vomiting in Pregnant Women.	2023	Testing the benefits of ginger candy for pregnant women used a quasi-experiment design with a one group pretest posttest design.	The results of the statistical tests carried out obtained the p value- $0,000 > (0,05)$, meaning deep Providing ginger candy intervention was quite effective in reducing complaints of nausea accompanied by vomiting in pregnant women in the first trimester of pregnancy
10.	Rahmawati, WR, Ridwan, M., & Widiastuti, A.	Giving boiled ginger water reduces nausea and vomiting in first trimester pregnant women.	2023	This research used a quasi experiment with a One Group Pre-test Post-test design.	The results of the study showed that there was an effect of giving boiled ginger water on reducing nausea and vomiting in pregnant women in the first trimester with a p value of 0.000.

Frequency

Ginger has been used as a traditional medicine to treat nausea and vomiting for centuries. Giving ginger can reduce the intensity of nausea and vomiting in pregnant women. Ginger contains gingerol and shogaol which have anti-nausea and anti-vomiting effects. These two compounds work by inhibiting the release of histamine, a chemical that can cause nausea and vomiting.

Giving ginger has become an interesting research topic in an effort to reduce the frequency of nausea and vomiting in pregnant women. Several scientific studies show the potential of ginger in reducing the frequency and intensity of nausea and vomiting in pregnant women. This is due to ginger's anti-nausea, anti-inflammatory and muscle relaxant properties. Active compounds in ginger, such as gingerol, are believed to help relieve nausea by affecting receptors in the digestive

tract. Ginger's anti-inflammatory properties can also reduce inflammation in the digestive system which may be the cause of nausea and vomiting. Apart from that, the distinctive aroma of ginger can have a calming effect which helps reduce stress, which often triggers nausea and vomiting in pregnant women. According to Kurnia's research results in 2019, there was an effect of giving ginger aromatherapy on nausea and vomiting in pregnant women in the first trimester. Although the initial research results are promising, it is important to note that reactions to ginger can vary between individuals, and its use must be based on medical consultation. Further studies are needed to understand in more depth the effects of giving ginger to pregnant women and determine safe doses and methods of consumption.

Several studies show that giving ginger can help reduce the frequency of nausea and vomiting in pregnant women. According to research results Indrayani et al in 2018 published in the Journal of Maternal-Fetal & Neonatal Medicine found that giving ginger regularly for 4 days can reduce the frequency of nausea and vomiting in pregnant women who experience hyperemesis gravidarum, which is a condition of severe nausea and vomiting during pregnancy. Apart from that, according to the results of Nurdiana's research in 2019 published in the Journal of Obstetrics and Gynecology, it shows that giving ginger can significantly reduce the frequency of nausea and vomiting in pregnant women compared to placebo.

However, further research is still needed to confirm the effectiveness of ginger in treating nausea and vomiting in pregnant women and determine the right dose. Therefore, before giving ginger to pregnant women, you should first consult with an obstetrician to ensure safety and the correct dosage. Even though ginger is relatively safe for pregnant women to consume, it is best to consult a doctor first before consuming it. This is to ensure that ginger does not cause side effects on pregnancy.

Intensity

Several studies show that giving ginger can help reduce the intensity of nausea and vomiting in pregnant women. According to the results of research by Oktaviani et al in 2021 conducted at PMB, it was found that giving a brew of ginger and mint leaves can reduce nausea and vomiting in pregnant women in the first trimester. In addition, according to the results of research by Purba et al in 2023, it shows that ginger drink is effective in reducing emesis. gravidarum in pregnant women in the first trimester. According to the results of research by Liawati et al in 2022 at the Sehat Medika Clinic, it was found that almost all of the intensity of nausea and vomiting in pregnant women in the first trimester showed levels of nausea and vomiting in the moderate category before being given boiled ginger water, but after being given water. ginger decoction, the intensity of nausea and vomiting decreased to the mild category. Apart from that, based on the results of research by Rahmawati et al in 2023, it shows that giving boiled ginger is effective in reducing nausea and vomiting in pregnant women. However, further research is still needed to confirm the effectiveness of ginger in treating nausea and vomiting in pregnant women and determine the right dose. Therefore, before giving ginger to pregnant women, you should first consult with an obstetrician to ensure safety and the correct dosage.

Nausea and vomiting in pregnant women in the first trimester usually lasts for 4-12 weeks. However, in some cases, nausea and vomiting can last longer. Giving ginger can help reduce the duration of nausea and vomiting in pregnant women in the first trimester, so that pregnant women can feel more comfortable and experience pregnancy better.

Duration

Giving ginger has become a concern in efforts to reduce the duration of nausea and vomiting in pregnant women, especially during the first trimester of pregnancy. Ginger contains compounds such as gingerol which have anti-nausea and anti-inflammatory properties. This compound is

believed to help relieve nausea and vomiting by reducing the activity of nausea receptors in the digestive tract and treating inflammation that may be the cause. Some early scientific studies show that consuming ginger, whether in the form of ginger tea, ginger capsules, or ginger additives in food, can reduce the duration of nausea and vomiting in pregnant women. Although the results of this study are promising, it is important to note that responses to ginger can vary between individuals, and most studies still require further research to confirm the results. Therefore, before using ginger during pregnancy, consult your doctor first to ensure a safe dose and appropriate consumption method and consider the benefits and risks.

Several studies show that giving ginger can help reduce the duration of nausea and vomiting in first trimester pregnant women. According to the results of research conducted by Herman et al in 2023 at the Community Health Center, it was found that giving warm ginger drinks for 3 days could reduce the frequency of nausea and vomiting in first trimester pregnant women. Apart from that, according to the results of research by Ariendha et al in 2023, it shows that steeping ginger and orange juice can reduce nausea and vomiting in first trimester pregnant women. Based on the results of research by Liawati et al in 2022 at the Sehat Medika Clinic, it was found that the intensity of nausea and vomiting in pregnant women in the first trimester decreased after being given boiled ginger water. Apart from that, according to Astriana's research results in 2019, it was shown that giving boiled ginger water was effective in reducing reduction of nausea and vomiting in first trimester pregnant women. However, further research is still needed to ensure the effectiveness of ginger in treating the duration of nausea and vomiting in pregnant women and determining the appropriate dose. Therefore, before giving ginger to pregnant women, you should first consult with an obstetrician to ensure safety and the correct dosage.

Side effects

Although ginger is considered safe to consume during pregnancy, several studies show that giving ginger to pregnant women in the first trimester can cause side effects such as stomach irritation, dry mouth and diarrhea. Apart from that, giving ginger in high doses can also cause an increased risk of bleeding and uterine contractions. Therefore, before giving ginger to pregnant women, you should first consult with an obstetrician to ensure safety and the correct dosage. Apart from that, pregnant women should also not consume excessive amounts of ginger and pay attention to the body's reaction after consuming it. If unwanted side effects or symptoms occur, immediately stop using ginger and consult a gynecologist.

CONCLUSION

Ginger has the potential to reduce nausea and vomiting and their intensity, and may also influence the duration of nausea and vomiting symptoms in pregnant women, especially during the first trimester of pregnancy. The anti-nausea, anti-inflammatory properties and muscle relaxant effects of the compounds in ginger, such as gingerol, can help relieve these symptoms. The distinctive aroma of ginger also provides a sense of comfort and helps reduce stress which often plays a role in worsening nausea and vomiting during pregnancy. Although early research shows the positive potential of ginger, individual reactions may vary, and dosage and method of consumption need to be carefully considered. Before taking any steps, it is very important to consult a doctor or experienced healthcare professional to ensure that the use of ginger is safe and appropriate to the individual's needs. More research is needed to fully understand the benefits of ginger and appropriate dosage for pregnant women.

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